LIGO

BIOS



France Córdova is 14th director of the National Science Foundation. Córdova leads the only government agency charged with advancing all fields of scientific discovery, technological innovation, and STEM education. Córdova has a distinguished resume, including: chair of the Smithsonian Institution's Board of Regents; president emerita of Purdue University; chancellor of the University of California, Riverside; vice chancellor for research at the University of California, Santa Barbara; NASA's chief scientist; head of the astronomy and astrophysics department at Penn State; and deputy group leader at Los Alamos National Laboratory. She received her B.A. from Stanford University and her Ph.D. in physics from the California Institute of Technology.



Gabriela González is spokesperson for the LIGO Scientific Collaboration. She completed her PhD at Syracuse University in 1995, then worked as a staff scientist in the LIGO group at MIT until 1997, when she joined the faculty at Penn State. In 2001, she joined the faculty at Louisiana State University, where she is a professor of physics and astronomy. The González group's current research focuses on characterization of the LIGO detector noise, detector calibration, and searching for gravitational waves in the data. In 2007, she was elected a fellow of the American Physical Society for her experimental contributions to the field of gravitational wave detection, her leadership in the analysis of LIGO data for gravitational wave signals, and for her skill in communicating the excitement of physics to students and the public.



David Reitze is executive director of the LIGO Laboratory at Caltech. In 1990, he completed his PhD at the University of Texas, Austin, where his research focused on ultrafast laser-matter interactions. He held research positions at Bell Communications Research and Lawrence Livermore National Laboratory before joining the physics faculty at the University of Florida in 1993. He began working on LIGO in 1996 as the initial LIGO Input Optics subsystem leader, a role he reprised for Advanced LIGO. In 2006, he was elected a fellow of the American Physical Society for leadership in the applications of lasers in diverse areas from the detection of gravitational waves to the ultrafast response of matter. Reitze served as the spokesperson

for the LIGO Scientific Collaboration from 2007 to 2011 and took an extended leave of absence from the University of Florida in 2011 to serve as LIGO's executive director. In 2015, he was elected a fellow of the Optical Society.



Kip Thorne is Caltech's Richard P. Feynman Professor of Theoretical Physics, Emeritus. He obtained his PhD in physics from Princeton University in 1965 and joined Caltech's physics faculty in 1966. He cofounded the LIGO Project in 1984 with Rainer Weiss and Ronald Drever; in 2004 he cofounded, with Cornell's Saul Teukolsky, the SXS Numerical Relativity Project, which simulates LIGO's gravitational wave sources on supercomputers. Thorne was elected to the American Academy of Arts and Sciences in 1972, the National Academy of Sciences in 1973, and the Russian Academy of Sciences in 1999. His research has focused on general relativity and astrophysics with emphasis on relativistic stars, black holes,

and gravitational waves. Thorne, along with film producer Lynda Obst he coauthored the treatment that gave rise to Christopher Nolan's 2014 movie Interstellar. Thorne was the movie's executive producer and science adviser.



Rainer Weiss is an emeritus professor of physics at MIT. In 1962, he completed his PhD at the MIT, where his research focused on atomic beams. He worked as a research associate at Princeton University until 1964, when he joined the physics faculty at MIT. Weiss worked on measurements of the cosmic background radiation and was chair of the science working group for NASA's Cosmic Background Explorer mission. He cofounded the LIGO project in 1984 with Kip Thorne and Ronald Drever. In 1996, Weiss was elected a fellow of the American Physical Society for his pioneering work in the development of laser-interferometric detectors for gravitational radiation and his contributions to the study of the spectrum and

anisotropy of the cosmic microwave background. He is a fellow of both the American Association for the Advancement of Science and the American Academy of Arts and Sciences, and is a member of the National Academy of Sciences. Weiss and Ronald Drever received the Einstein Prize of the American Physical Society in 2007.